



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,254	11/26/2003	David J. Yonce	279.628US1	6063
21186	7590	10/06/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			OROPEZA, FRANCES P	
			ART UNIT	PAPER NUMBER
			3766	

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/723,254	YONCE ET AL.
	Examiner Frances P. Oropeza	Art Unit 3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 7/26/06 (Amendment).
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date: _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION***Claim Rejections - 35 USC § 112***

1. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 9 and claim 11, line 9, the meaning of “an aggregate display” is unclear.

While the Applicant asserts, in his 7/26/06 arguments, that based on figures 2B and 3B, the “aggregate display” of the representative electrocardiograms refers to a display in which the plurality of electrocardiograms are overlain upon one another, the notion of displaying representative electrocardiogram “in an aggregate fashion” (instant specification – page 10, line 15) indicates the representative electrocardiograms, related to time period or heart rate, are “represented by the individual representative electrocardiograms indicated graphically”. There is no mention the aggregate of representative electrocardiograms are overlain upon one another. Lacking a clearly set forth and explicit definition of the term “aggregate display”, the use of the broadest reasonable interpretation consist with the ordinary and customary meaning attributed to “an aggregate display” is deemed appropriate. In the examination of this application, the Examiner has used the ordinary and customary meaning attributed to the concept of “an aggregate display”: an electronic device (monitor or screen) that presents information in a visual form, the information related to taking all units as a whole/ gathering into a mass or whole/ the whole sum or amount. The Applicant is encouraged to amend the claims to better reflect what the Applicant appears to intend to claim as the invention, specifically electrocardiograms overlying on one another.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. Claims 1-7 and 9-16 stand rejected under 35 U.S.C. 102(e) as being anticipated by Levine et al. (US 6748274). Levine et al. disclose a method and apparatus for displaying information comprising an implantable device (100) the implantable device comprising a first sensing channel (82 or 84) and a controller (60). The method and apparatus further comprise an external programmer (102) including a display (video display (214) and printer (236)) to show graphical data (waveform and histogram). The electrocardiogram data is compiled with respect to time and with respect to heart rate. Events are time stamped/ marked (figures 2, 3, 5, 8-11B; col. 5 @ 33-45; col. 7 @ 7-16; col. 9 @ 1-12; col. 10 @ 60-62; col. 12 @ 53-54; col. 13 @ 59-61; col. 14 @ 16-18, 31-34; col. 15 @ 5-12; col. 16 @ 17-19).

As to claims 2 and 13, the representative electrocardiogram (IECG) is an average of a plurality of IECGs and is a function of time/ heart rate (col. 14 @ 31-34; col. 15 @ 5-13; col. 15 @ 67 – col. 16 @ 3).

As to claims 3 and 12, the representative electrocardiogram (IECG) is a single IECG and is a function of time/ heart rate (col. 12 @ 42-47; col. 14 @ 31-34; col. 15 @ 5-13).

As to claims 4 and 14, the representative electrocardiogram (IECG) is an intrinsic IECG and are a function of time/ heart rate (col. 13 @ 55-57; col. 14 @ 31-34; col. 15 @ 5-13).

As to claims 5 and 15, the representative electrocardiograms are evoked responses from the evoked response window, collected as paces, and are functions of time/ heart rate (col. 4 @ 3-6; col. 7 @ 42; col. 15 @ 5-13; col. 15 @ - col. 16 @ 3).

As to claims 6 and 9, the representative electrocardiograms may be continuous relative to time and period, and are derived as a function of time/ heart rate (col. 15 @ 5-13; col. 15 @ 67 – col. 16 @ 3).

Art Unit: 3766

As to claims 7 and 16, the display screen 9214) or the printer (236) display the representative electrocardiogram (fig. 5).

As to claim 10, the controller maintains representative electrocardiograms being discarded (col. 14 @ 63-67).

The Applicant's arguments filed 7/26/06 have been fully considered, but they are not convincing.

The Applicant asserts Levine et al. do not teach generating a plurality of representative electrocardiograms each of which represents a different time period. The Examiner disagrees. Levine et al. teach generating a plurality of representative electrocardiograms, each electrocardiogram representing a different time period as the events are continuously recorded at a location for a period of time (col. 14 @ 60-63; col. 15 @ 5-9).

The Applicant asserts Levine et al. do not teach generating a plurality of representative electrocardiograms each of which represents a different heart rate range. The Examiner disagrees. Levine et al. teach generating a plurality of representative electrocardiograms each of which represents a different heart rate range, the electrocardiogram being the intrinsic events associated with potential arrhythmias at various heart rates (col. 8 @ 12-27; col. 10 @ 28-33; col. 13 @ 61 – col. 14 @ 1; col. 14 @ 18-22).

The Applicant asserts Levine et al. do not teach displaying a plurality of electrocardiograms as an aggregate. The Examiner disagrees. Levine et al. teach displaying a plurality of electrocardiograms as an aggregate. Levine et al. teach displaying data from multiple sites, hence an aggregate of electrocardiograms can be displayed (abstract; figure 10: col. 16 @ 35-47; col. 15 @ 61 – col. 16 @ 9).

Claim Rejections - 35 USC § 103

3. Claims 8 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Levine et al. (US 6748274) in view of Palmer et al. (US 5830150). As discussed in paragraph 2 of this action, Levine et al. disclose the claimed invention except for the graphic display having the magnitude of the electrocardiogram displayed in shading or color.

Palmer et al. teach data display using a graphic display having the magnitude of the electrocardiogram displayed in shading or color for the purpose of highlighting changes in the condition of the patient. It would have been obvious to one having ordinary skill in the art at the time of the invention to have the magnitude of the electrocardiogram displayed in shading or color in the Levine et al. system in order for the caregivers to become more easily aware of striking events and more subtle events, the caregiver's eyes being drawn by the colors to the variable at the time of its change so appropriate care can be provided for the patient's changing condition (col. 1 @ 53-55; col. 3 @ 6-18; col. 4 @ 1-26; col. 5 @ 1-23).

Statutory Basis

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

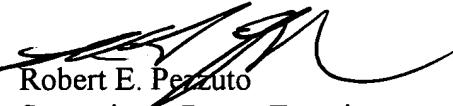
Art Unit: 3766

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fran Oropeza whose telephone number is (571) 272-4953. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and for After Final communications.

Frances P. Oropeza
Patent Examiner
Art Unit 3766

JPO
9/29/06


Robert E. Pezzuto
Supervisory Patent Examiner
Art Unit 3766